Coast Guard, DHS § 148.04–9

§148.03-7 During transport.

During the transport of a solid hazardous material in bulk, except for unmanned vessels, cargo shall be periodically inspected to ensure that there are no undetected increases in temperature in that cargo and that no other changes in the cargo are occurring that might affect the safety of his vessel and the results of these inspections shall be recorded in a log.

§148.03-11 Stowage conditions.

- (a) Other hazardous materials cargo must not be stowed in the same hold or on deck above a hold in which a solid hazardous material in bulk is loaded.
- (b) No explosive Class C, flammable liquid, flammable solid, flammable or nonflammable compressed gas, organic peroxide, or extremely dangerous poison may be stowed in any hold adjacent to a hold in which a solid hazardous material in bulk is loaded.
- (c) All explosive Class A and B materials must be stowed longitudinally at least one hold (or an equivalent longitudinal distance if on deck) from any hold in which hazardous material in bulk is loaded.
- (d) Combustible cargo must not be stowed in a hold in which a solid hazardous material in bulk is loaded.

§ 148.03-13 Completion of off-loading.

Upon the completion of off-loading of a solid hazardous material in bulk, each hold must be thoroughly cleaned of all residue of such material.

Subpart 148.04—Special Additional Requirements for Certain Material

§ 148.04-1 Radioactive material, Low Specific Activity (LSA).

- (a) Authorized materials are limited to:
- (1) Uranium or thorium ores and physical or chemical concentrates of such ores;
- (2) Uranium metal, natural thorium metal and alloys of these metals; and
- (3) Material of low radioactive concentration, if the estimated radioactivity concentration dose not exceed 0.001 millicurie per gram and the contribution from Group I material (See

title 49 CFR parts 170 to 189, inclusive) does not exceed 1 percent of the total radioactivity.

- (b) Each hold used for the transportation of any of these materials must be surveyed with appropriate radiation-detection instruments after the completion of off-loading. Such holds must not again be used for the transportation of any cargo until the radiation dose rate at any accessible surface is less than 0.5 millirem per hour and until there is no significant removable radioactive surface contamination according to 49 CFR 173.443.
- (c) Each hold or barge used for transportation of any of these materials must be effectively closed or covered to prevent dispersal of the material during transportation.

§ 148.04-9 Fishmeal or scrap, ground or pelletized; fishmeal or scrap, ground and pelletized (mixture).

- (a) The fishmeal or scrap, ground or pelletized and fishmeal or scrap, ground and pelletized mixture must contain at least 6 percent moisture by weight but not more than 12 percent moisture by weight.
- (b) The material must not contain more than 18 percent fat by weight.
- (c) At the time of production of the material, it must be treated with at least 400 ppm antioxidant (ethoxyquin); in the case where the material contains more than 12 percent fat by weight, it must be treated with at least 1000 ppm antioxidant (ethoxyquin) at the time of production.
- (d) Shipment of the material in bulk must take place within twelve months of the date of production.
- (e) The temperature of the material to be loaded must not, at the time of loading exceed 35 °C (95 °F), or 5 °F above ambient temperature, whichever is greater.
- (f) The material must contain at least 100 ppm antioxidant (ethoxyquin) at the time of shipment.
- (g) Each shipment of the material in bulk must be accompanied by a statement in which the shipper certifies:
- (1) The moisture content of the material:
- (2) The fat content of the material;
- (3) The concentration of antioxidant (ethoxyquin) in the material in ppm at

§ 148.04-13

the time the material is loaded on a vessel in bulk;

- (4) Date and place of production of the material; and
- (5) The physical state of the material (ground, pelletized, or mixture).
- (h) Temperature readings must be taken three times a day and recorded. If the temperature of the cargo exceeds 130 °F and continues to increase, ventilation to the hold must be restricted.

§ 148.04-13 Ferrous metal borings, shavings, turnings, or cuttings (excluding stainless steel).

- (a) This section applies to the stowage and transportation in bulk of hazardous materials described as ferrous metal borings, shavings, turnings, or cuttings on board vessels (excluding stainless steel). However, unmanned barges on which the article is stowed for or transported on a voyage entirely on the navigable waters of the United States are exempt from the requirements of this section. Ferrous metal borings, shavings, turnings, or cuttings (excluding stainless steel) must not be stowed and transported in bulk unless the following conditions are met:
 - (1) [Reserved]
- (2) All wooden sweat battens, dunnage and debris must be removed from the hold before the article is loaded.
- (3) During loading and transporting, the bilge of each hold in which the article is stowed or is to be stowed must be as dry as practicable.
- (4) During loading, the article must be compacted in the hold as frequently as practicable with a bulldozer or means that provide equivalent surface compaction. Upon completion of loading, the article must be trimmed to eliminate peaks or mounds and compacted.
- (5) Other cargo must not be loaded in a hold containing the article if:
- (i) The cargo to be loaded in the same hold with the article is another hazardous material as defined in this part or a combustible material;
- (ii) The loading of the article is not completed first; and
- (iii) The temperature of the article in the hold is above $130~{}^{\circ}\mathrm{F}$ or has increased within eight hours before loading of the other cargo.

- (6) During loading, the temperature of the article in the pile being loaded must be less than 130 °F.
- (7) Upon completion of loading, the vessel may not leave the port unless:
- (i) The temperature of each article in each hold is less than 150 °F and, if the temperature of the article in a hold has been more than 150 °F during loading, the temperature of each article has shown a downward trend below 150 °F for at least eight hours after completion of loading of the hold; or
- (ii) The vessel intends to sail directly to another port that is no further than twelve hours sailing time for the vessel concerned, for the purpose of loading more of the article in bulk or to completely off-load the article, and the temperature of the article is less than 190 °F and has shown a downward trend for a least eight hours after completion of loading.
- (b) For the purposes of each temperature requirement of this section, the temperature of the article is the highest temperature taken between eight and fourteen inches below the surface at ten-foot intervals over its length and width.
- (c) The master or person in charge of a vessel that is loading or transporting the article must ensure that the temperature of the article is taken:
 - (1) Before loading;
- (2) During loading, in each hold and in the pile being loaded at least every twenty-four hours and, if the temperature is rising, as often as necessary to ensure the conditions in this section are met; and
- (3) After loading, in each hold at least every twenty-four hours.
- (d) During loading, if the temperature of the article in a hold is 200 $^{\circ}F$ or higher, the master or person in charge of the vessel must notify the Coast Guard Captain of the Port and suspend loading until the temperature of the article is less than 190 $^{\circ}F$.
 - (e) After loading:
- (1) If the temperature of the article is $150\,^{\circ}\mathrm{F}$ or above, the master or person in charge must notify the Captain of the Port and ensure that the vessel remains in the port area until the conditions of paragraph (a)(7)(i) of this section are met; or